

In the Claims

Please add Claims 2-109 as follows.

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1. (Original) A method for routing media comprising:  
receiving a request for media;  
determining a program in which the requested media is identified;  
creating a presentation having a presentation identification based on the program;  
generating a reservation comprising a reservation identification and the presentation;  
generating a play script comprising the reservation identification and at least one media  
identification for the requested media;  
receiving the reservation, the reservation identification, and the media identification at a  
routing processor;  
validating at the routing processor the reservation identification with the reservation and  
determining a media switch configured to stream the media identified by the  
media identification;  
generating an address for the media switch upon validating the reservation identification  
and determining the media switch; and  
streaming the media identified by the media identification from the media switch upon a  
session being initiated at the address.

2. (New) A method for routing media to a viewer for a request comprising:  
identifying at least one program in which at least a portion of the media is available;  
processing the request with at least one program rule of the at least one program to  
generate a presentation identifying the at least one portion of the media;  
generating a reservation associated with the presentation; and  
identifying at least one resource to stream the presentation to the viewer based on the  
reservation.

3. (New) The method of claim 2 further comprising:  
identifying at least one other program in which at least one other portion of the media is  
listed;

processing the request with at least one other program rule of the at least one other program to generate at least one other presentation identifying the at least one other portion of the media;  
generating at least one other reservation associated with the at least one other presentation; and  
identifying, based on the at least one other reservation, if the at least one resource is configured to stream the at least one other presentation.

4. (New) The method of claim 2 further comprising:  
identifying at least one other program in which at least one other portion of the media is listed;

processing the request with at least one other program rule of the at least one other program to generate at least one other presentation identifying the at least one other portion of the media;  
generating at least one other reservation associated with the at least one other presentation; and  
identifying, based on the at least one other reservation, at least one other resource to stream the at least one other presentation.

5. (New) The method of claim 2 further comprising:  
identifying at least one other program in which at least one other portion of the media is listed;

processing the request with at least one other program rule of the at least one other program; and  
generating the presentation identifying the at least one portion of the media and the at least one other portion of the media.

6. (New) The method of claim 2 further comprising:  
generating a presentation identification for the presentation and a reservation identification for the reservation; and  
generating the presentation, the presentation identification, and the reservation identification as the reservation.

7. (New) The method of claim 2 further comprising applying a viewer profile to the at least one program to create the presentation.

8. (New) The method of claim 2 further comprising generating a play script for the presentation for the viewer, the play script comprising at least one media reference identifying the at least one portion of the media.

9. (New) The method of claim 8 wherein the generating step further comprises generating the play script with a plurality of media references identifying a plurality of media.

10. (New) The method of claim 8 further comprising generating the at least one media reference to identify at least one media clip and a reservation identification for the reservation.

11. (New) The method of claim 8 further comprising generating the at least one media reference to comprise a universal resource locator that identifies at least one media clip and a reservation identification for the reservation.

12. (New) The method of claim 8 further comprising generating the at least one media reference to comprise at least one member of a group comprising a recorded media reference, a live media reference, a media alias, and a media selector.

13. (New) The method of claim 8 further comprising formatting the play script according to a player type for the viewer.

14. (New) The method of claim 8 further comprising transmitting an address of the at least one resource to the viewer.

15. (New) The method of claim 2 wherein the at least one resource comprises a switch and the method further comprises:

distributing the at least one program to the switch;

selecting the switch to stream the presentation to the viewer; and

streaming the at least one portion of the media from the switch to the viewer.

16. (New) The method of claim 2 further comprising selecting the resource from at least one member of a group comprising a switch, a media server software of the switch, and a stream caster of the switch.

17. (New) The method of claim 2 wherein:  
the at least one program has a program identification; and  
the method further comprises tracking the program by the program identification using a management system.

18. (New) The method of claim 17 further comprising using the program identification to track at least one member of a group comprising a number of times a selected media of the at least one program is streamed, a number of times the at least one program is streamed, a viewer attribute associated with the viewer receiving media from the at least one program, and at least one other media from at least one other program streamed with the at least one portion of the at least one program.

19. (New) The method of claim 2 further comprising using as the program rule at least one member of a group comprising a program creation rule and a program routing rule.

20. (New) The method of claim 2 further comprising using at least one order comprising at least one order component with the at least one program.

21. (New) The method of claim 20 further comprising using as the at least one order component at least one member of a group comprising a service rule identifying how a media viewing should be paid, a storage rule identifying where the media and the program will be located for physical storage, a collection rule identifying an entity collecting a payment for services rendered, a viewing rule identifying acceptable viewers that can receive the media and the program, and a settlement rule identifying how a collection is divided among participating entities.

22. (New) The method of claim 20 further comprising using a service processor to enable entry of the at least one program and the at least one order for the at least one program.

23. (New) A method for routing media to a viewer for a request comprising:

processing the request at a reservation system to identify at least one program in which at least a portion of the media is identified;  
processing the request with at least one program rule of the program to generate a presentation identifying the media, the presentation being in a format receivable by the viewer;  
generating a reservation associated with the presentation from the reservation system;  
receiving the reservation at a routing processor and identifying, based on the reservation, a resource to stream the presentation to the viewer; and  
generating an address of the resource in a format receivable by the viewer.

24. (New) The method of claim 23 wherein generating the presentation identifying the media further comprises generating in the presentation an identification of the media to be streamed and an identification of the routing processor.

25. (New) The method of claim 23 wherein generating the presentation further comprises generating in the presentation at least one member of a group comprising a media sequence instruction, a binding media instruction, and a special routing instruction.

26. (New) The method of claim 23 further comprising generating a reservation identification as an identifier for the request.

27. (New) The method of claim 23 wherein processing the request with the at least one program rule further comprises processing the request for a time period in which the reservation will be valid for the viewer to view the media.

28. (New) The method of claim 27 wherein processing the request for the time period further comprises setting the time period between a starting time and an ending time.

29. (New) The method of claim 23 further comprising receiving the request from the viewer at a portal and transmitting the request from the portal to the reservation system.

30. (New) The method of claim 23 further comprising:  
receiving the request at a management system;  
providing the request to the reservation system;  
identifying and temporarily reserving the resource for streaming the media; and

identifying the routing processor as managing the resource.

31. (New) The method of claim 30 further comprising:

generating from the reservation system a reservation identification for the reservation;  
and

generating a play script from the management system, the play script comprising at least one reference for the at least the portion of the media, the reservation identification, and a routing processor identification corresponding to the routing processor.

32. (New) The method of claim 30 further comprising configuring the reservation system as a subsystem of the management system.

33. (New) The method of claim 23 further comprising using as the resource at least one member of a group comprising a switch, a media server software of the switch, and a stream caster of the switch.

34. (New) A method for providing media for routing comprising:

enabling entry of a program at a service processor, the program comprising at least one media reference and at least one order component for an order;

assigning a program identification to the program;

publishing the program with the program identification and the order from the service processor;

receiving the program with the program identification and the order at a management system; and

tracking use of the at least one media reference in the program via the program identification.

35. (New) The method of claim 34 further comprising enabling entry of a rule for the program, the rule comprising at least one member of a group comprising a program creation rule and a program routing rule.

36. (New) The method of claim 34 further comprising selecting for the at least one order component at least one member of a group comprising a service rule identifying how a

media viewing should be paid, a storage rule identifying where the media and the program will be located for physical storage, a collection rule identifying an entity collecting a payment for services rendered, a viewing rule identifying acceptable viewers that can receive the media and the program, and a settlement rule identifying how a collection is divided among participating entities.

37. (New) A method for providing media for routing comprising:  
enabling entry of a program at a service processor, the program comprising at least one media reference and at least one order component for an order;  
assigning a program identification to the program;  
publishing the program with the program identification and the order from the service processor;  
receiving the published program at a switch;  
streaming media identified by the at least one media reference upon receiving a valid reservation for the program.

38. (New) The method of claim 37 further comprising:  
enabling entry of a plurality of media references for the program and a plurality of order components for the order at the service processor; and  
streaming media from the switch identified by at least a portion of the plurality of media references upon receiving the valid reservation for the program.

39. (New) A method for reserving media for a request from a viewer comprising:  
generating a presentation for the media based on a program identifying the media, the program comprising a media reference identifying the media and an order having at least one order component;  
determining if a system resource is available to stream the presentation and, if so,  
creating a reservation for the presentation; and  
assigning a reservation identification to the reservation.

40. (New) The method of claim 39 further comprising processing a viewer profile of the viewer with a program rule for the program to generate the presentation.

41. (New) The method of claim 40 further comprising dynamically selecting another media for the presentation based upon the viewer profile.

42. (New) The method of claim 41 wherein the dynamically selecting step comprises selecting at least one member of a group comprising an advertisement and a selected one of a plurality of media clips associated with the request.

43. (New) The method of claim 42 wherein the dynamically selecting step comprises selecting the selected media clip based on at least one member of a group comprising a presentation criteria and an attribute of the viewer profile.

44. (New) The method of claim 43 wherein the dynamically selecting step comprises selecting the selected media clip based on the attribute comprising at least one member of a group comprising an age, a gender, a marital status, an income, a geographic location, a hobby, a preference, and a job grade.

45. (New) The method of claim 43 wherein the attribute comprises a collected data of the viewer and wherein selecting the selected media clip based on the attribute comprises selecting the selected media clip based on the collected data of the viewer.

46. (New) The method of claim 45 wherein the collected data comprises at least one member of a group comprising a viewing history and a purchasing history.

47. (New) The method of claim 43 wherein the attribute comprises a configurable attribute based on the viewer and wherein selecting the selected media clip based on the attribute comprises selecting the selected media clip based on the configurable attribute.

48. (New) The method of claim 39 further comprising dynamically selecting another media for the presentation based on a level of revenue to be generated by streaming the selected another media.

49. (New) The method of claim 39 further comprising dynamically selecting another media for the presentation based on a viewer attribute.

50. (New) The method of claim 39 further comprising tracking the reservation identification for the reservation.



51. (New) The method of claim 39 further comprising processing the presentation and the request to identify if the system resource is available.

52. (New) The method of claim 51 further comprising selecting the system resource from at least one member of a group comprising a switch, a media server software of the switch, and a stream caster of the switch.

53. (New) The method of claim 51 further comprising identifying another system configured to stream the presentation if the system resource is not available and to pass the request to the another system.

54. (New) The method of claim 53 wherein the another system comprises at least one member of a group comprising a streaming management system and an external system.

55. (New) The method of claim 39 further comprising selecting a routing processor to handle routing the media and transmitting the reservation, including the reservation identification, to the routing processor.

56. (New) The method of claim 55 wherein the transmitting step comprises transmitting the reservation, including the reservation identification, to the routing processor at a configurable time before a start time of the presentation.

57. (New) The method of claim 39 further comprising generating a play script corresponding to the presentation for the viewer.

58. (New) The method of claim 57 wherein the generating the play script step comprises generating an identification of at least one media reference and the reservation identification.

59. (New) The method of claim 57 wherein the generating the play script step comprises generating an identification of a plurality of media references and the reservation identification.

60. (New) The method of claim 57 wherein the generating the play script step comprises generating at least one universal resource locator containing at least one media reference and the reservation identification.

61. (New) The method of claim 39 further comprising determining if the viewer is authorized to request the media.

62. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises identifying the viewer and authenticating the viewer to determine if the viewer is authorized to request the media.

63. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises comparing a viewer profile against a service rule to determine if the viewer profile complies with the service rule.

64. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises verifying that an order for the program is in effect and that the program is available for viewing by the viewer.

65. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises authorizing any viewer for requesting the media.

66. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises validating that the request is received from a valid communication system.

67. (New) The method of claim 61 wherein the determining if the viewer is authorized step comprises accessing data of an external system to determine if the request for the media is valid.

68. (New) The method of claim 39 further comprising validating a financial transaction for streaming the media prior to creating the reservation.

69. (New) A method for processing routing from a resource to a viewer for a request for media comprising:

receiving the request in a translatable protocol and translating the request from the translatable protocol to a reservation format;

identifying, at a routing engine, a resource configured to stream the media to the viewer according to a reservation for the media, the media being identified in at least one program;

generating a reply with an identification of the resource;

mapping the reply from the routing engine to the translatable protocol;

monitoring a communication status of at least one communication link with the resource; and

monitoring a processing status of the resource for operational capacity.

70. (New) The method of claim 69 further comprising maintaining in a reservation cache at least one member of a group comprising a current reservation and an imminent reservation.

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71. (New) The method of claim 69 further comprising:  
identifying an external system configured to stream the presentation if the resource is not able to stream the media to the viewer; and  
passing the request to the external system

72. (New) The method of claim 69 further comprising:  
caching program information in a media location cache, the program information comprising a plurality of identifications of a plurality of media for a plurality of programs; and  
reading the program information in the media location cache to determine if the resource is available to stream the requested media.

73. (New) The method of claim 72 wherein the caching step comprises caching program information comprising at least one member of a group comprising an identification of at least one location at which the plurality of media is located, an anticipated streaming time of the media, a playing time of the media, an average bandwidth needed to stream the media, a maximum bandwidth needed to stream the media, and a quality of encoding for the media.

74. (New) The method of claim 69 further comprising collecting event data when the media is streamed.

75. (New) The method of claim 74 wherein the collecting event data step comprises collecting state change data.

76. (New) The method of claim 69 further comprising maintaining the processing status in memory, the processing status comprising at least one member of a group comprising a total bandwidth used for routing the media, a total number of requests for the resource, a current not to exceed bandwidth capacity for the resource, a current not to exceed active requests capacity for the resource, a current processing capacity for a plurality of resources, and a current not to exceed processing capacity for the plurality of resources.

77. (New) The method of claim 69 further comprising rejecting the request when the request will place the processing status above a desired threshold.

78. (New) The method of claim 69 wherein the translatable protocol comprises a domain name server protocol, the receiving step further comprises receiving the request in the domain name server protocol, and the mapping step further comprises mapping the reply to the domain name server protocol.

79. (New) The method of claim 69 wherein the request comprises a routing processor identification in a domain name server protocol, and the mapping step further comprises mapping the reply for an internet protocol address of the resource.

80. (New) The method of claim 69 further comprising processing the request for at least one member of a group comprising in-band signaling and out-of-band signaling.

81. (New) The method of claim 69 further comprising:  
enabling entry of a definition of a managed object and a threshold value for an attribute  
of the managed object for the routing; and  
generating an alarm if an actual value of the attribute exceeds the threshold value.

82. (New) The method of claim 69 further comprising:  
monitoring a signaling process for the routing; and  
generating an alert upon a possible degradation of service and an actual degradation of  
service.

83. (New) The method of claim 69 further comprising:  
monitoring a signaling process associated with the request; and  
predicting at least one member of a group comprising a potential failure of the signaling process and an imminent failure of the signaling process.
84. (New) The method of claim 83 further comprising auto correcting the at least one member of the group comprising the potential failure and the imminent failure of the signaling process.
85. (New) The method of claim 69 further comprising:  
detecting if the resource is approaching capacity; and  
generating a report if planned usage and current usage exceed capacity.
86. (New) The method of claim 69 further comprising monitoring a signaling link status and storing the signaling link status.
87. (New) The method of claim 69 further comprising controlling a plurality of switches in a primary control domain, each switch comprising at least one media server software.
88. (New) The method of claim 69 further comprising computing an available capacity for a switch configured with the resource to stream the media.
89. (New) The method of claim 69 further comprising controlling a plurality of switches in a secondary control domain if a primary processor for the switches fails, each switch comprising at least one media server software.
90. (New) The method of claim 69 further comprising monitoring a state model of the reservation.
91. (New) The method of claim 69 further comprising controlling conversion of the request between a reservation format and another signaling protocol.
92. (New) The method of claim 69 further comprising controlling a communication with another routing process for routing the media to the viewer.

93. (New) The method of claim 69 further comprising maintaining a timer for a remote routed request for media and canceling the remote routed request if a time for the timer expires.

94. (New) The method of claim 69 further comprising determining if the request is received from a valid location.

95. (New) The method of claim 94 further comprising comparing security data from a security authorization storage element to the request to validate the request.

96. (New) The method of claim 69 further comprising validating the request by at least one member of a group comprising identifying an IP address of the viewer and verifying that the IP address is valid, reading embedded security key data within the request and validating the security key data, identifying a physical device serial number associated with the viewer sending the request and validating the serial number, identifying a signaling link over which the request is received by a routing process as a secure link, identifying a signaling end-point as a known signaling network point, validating a portal from which the request is received, and validating a reservation identification for the request.

97. (New) The method of claim 69 further comprising identifying and storing signaling link communication information for each signaling link associated with the routing processing.

98. (New) The method of claim 97 wherein the storing signaling link communication information step comprises storing signaling link communication information comprising at least one member of a group comprising whether a signaling link uses in-band signaling, whether the signaling link uses out-of-band signaling, a protocol used with the signaling link, a back-up signaling link for a signaling network point, whether the signaling link is operational, a reason for a non-operational signaling link, a desired not to exceed link load limit, a signaling link prioritization to a given signaling network point, and a transport type.

99. (New) The method of claim 69 further comprising converting the request between a reservation format and a protocol processable by a device transmitting the request.

100. (New) The method of claim 69 further comprising converting the reply between the reservation format and a protocol processable by a device receiving the reply.

101. (New) The method of claim 100 further comprising determining a conversion protocol needed to convert the reply from a plurality of routines in a protocol conversion library.

102. (New) The method of claim 69 further comprising:  
locating at least one switch configured with the requested media;  
determining if the switch has a capacity to stream the media to the viewer;  
matching the switch to a streaming service configuration if the switch has the capacity;  
and  
prioritizing the switch according to a routing preference.

103. (New) The method of claim 69 further comprising:  
identifying at least one other system configured to control delivery of the media to the viewer; and  
passing the request to the other system for processing.

104. (New) The method of claim 69 further comprising:  
locating a plurality of switches configured with the requested media;  
determining if the switches have a capacity to stream the media to the viewer;  
for those switches that have the capacity to stream the media, matching those switches to a streaming service configuration;  
prioritizing the switches having the capacity according to a routing preference; and  
generating a sorted list identifying the switches for streaming the media.

105. (New) The method of claim 69 further comprising configuring at least one switch controlled by the routing processing.

106. (New) The method of claim 69 further comprising configuring at least one network distribution rule for streaming media.

107. (New) The method of claim 69 further comprising maintaining at least one member of a group comprising a real-time stream control and a pre-established stream control.

A<sup>2</sup> 108. (New) The method of claim 69 further comprising monitoring current bandwidth usage and forecasting an anticipated bandwidth requirement based on current bandwidth usage and at least one scheduled reservation.

109. (New) The method of claim 69 further comprising executing at least one test to identify bandwidth latency between at least one switch and at least one pre-determined network point.

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